



## Study of Anidra (Insomnia) With Special Reference to Essential Hypertension as a Stress Disorder

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### Abstract

**Introduction-** *Nidra* is one among the “*Trayopasthambha*”. *Vata and Pitta* are the Pradhana Doshas contributing to *Anidra*. *Aswapna* is included in *Vataja Nanatmaja Vikaras* where quantity of *Nidra* is reduced.

**Aim-** To study *Anidra* with special reference to Essential Hypertension as a stress disorder **Objectives- 1.** To study the *Anidra* in relation to Essential Hypertension. **2.** To assess the *lakshanas* associated with *Anidra*.

**Methodology-** Study design- Descriptive observational study. Total 30 patients of either gender between the age group of 35 to 60 years were selected randomly for the study.

**Results-** *Lakshanas* like *Jrimbha* (Yawning) and *Tandra* (Drowsiness) were found in 36.66 % patients while, *Smritidourbalya*, *Manodourbalya*, *Glani*, *Shirashoola* and *Malabaddhata* were the least ( 6.66 % ) common *lakshanas* of *Anidra*.

**Discussion-** Out of total, 6 (20 %) subjects were having *Raja Pradhan Manas Prakriti* suggesting its prime role in causing Essential hypertension. We also found that out of total study subjects, total 7 (23 %) subjects were having *Vata-pitta Pradhan Deha Prakriti*. . Maximum patients were in stage 1 hypertension with blood pressure between 140-159 mmHg systolic and 90-99 mmHg of diastolic.

**Conclusion-** *Jrimbha*, *Tandra*, *Arati*, *Manodourbalya* and *Ajirna* were the common symptoms found in patients suffered from *Anidra*.

**Key Words-** Essential Hypertension, *Anidra*, *Jrimbha*, *Tandra*, *Vata dosha*.

### Introduction

*Nidra* is one among the “*Trayopasthambha*”.<sup>1</sup> *Vata and Pitta* are the Pradhana Doshas contributing to *Anidra*.<sup>2</sup> *Aswapna* is included in *Vataja Nanatmaja Vikaras* where quantity of *Nidra* is reduced.<sup>3</sup> There is also an opinion that increased *Pitta* is responsible for *Alpa Nidra*, where there is reduction in quality of *Nidra*.<sup>4</sup> Both *Alpa Nidra* and *Nidranasha* can be correlated to insomnia as it fits to the definition.

*Anidra* (Insomnia) is the most common sleep problem worldwide. It can lead to many psychosomatic manifestations like fatigue, high blood pressure, lack of concentration and ultimately reduce the productivity and badly hampers the quality of life. *Ayurveda* advocates some fruitful panchakarma therapies like *Nasya*, *Shirodhara* and *Murdhni Chikitsa* for *Mana* and *Indriya Vikaras*. *Anidra* can be clinically correlated with Insomnia.<sup>5</sup>

One out of every twenty Indian suffers from sleep disorder. Indian women 6.5% outnumber men 4.3%, when it comes to disturbed sleep. 16% of the population suffered from insomnia in India not far from the 20% that suffer from insomnia in the West. The findings suggest that, sleeplessness epidemic affects an estimated 150 million in developing world. In 20 years, over 260 million people will experience sleep disorders. 5% to 6% of people aged 50 years and above may be affected by sleep disorders in India.<sup>6</sup>

*Ayurveda* has described *Nidra* among the primary tripod of life<sup>7</sup> where the total abstinence of it may harm the life. *Nidranasha* is one of the *Vataja Naanaathmaja Vikara*<sup>8</sup> where it is mainly caused by *Vata Dosh* or *Pitta Dosh* or due to *Manastaapa*, *Sosha* or *Abhigata* in which *Moordhini Taila* is mentioned as one of its treatment<sup>9</sup>

Hypertension is the most prevalent cause for cerebrovascular and cardiovascular disorders, causing high rate of mortality and morbidity. Hypertension is also known as “silent killer” of mankind because most sufferers 85% are asymptomatic and as per available reports, in more than 95% cases of hypertension the underline causes are not found.<sup>10</sup> It is estimated that 600 million people are affected worldwide with hypertension. By the year 2025, approximately 1 in 3 adults aged over 20 years, totally 1.56 billion people worldwide, will have hypertension.<sup>11</sup>

The first and foremost aim of *Ayurveda* is to maintain the health of healthy individuals i.e. ‘*Swasthasya Swasthya Rakshanam*. To achieve this aim, *Shirodhara* can be a significant treatment modality. This procedure induces a relaxed state of awareness that results in a dynamic psycho-somatic balance. It is included in the varieties of the *Murdha Taila*, which are *Abhyanga*, *Seka*, *Pichu* and *Basti*<sup>12</sup>

The aim of present study was to evaluate the *Anidra* (Insomnia) with special reference to Essential Hypertension as a Stress disorder.

**Aim-** To study *Anidra* with special reference to Essential Hypertension as a stress disorder.

**Objective-**

1. To study *Anidra* in relation to Essential Hypertension.
2. To assess the lakshanas (symptoms) associated with *Anidra* and Essential hypertension.

**Material and methods**

**Study Design :** Descriptive Observational Study

**Study Place :** A clinical study of patients attending OPD and IPD of Post Graduate Department of Kayachikitsa in our institute will be made and subjects fulfilling the criteria of diagnosis as per the Performa will be selected for the study.

**Study Tool:** A clinical evaluation of patients will be done by collection of data through information obtained by history, physical examination.

A well structured questionnaire was used for the study. Blood pressure reading were measured (by Sphygmomanometer and manual method). Observations like Pulse Rate, Blood Pressure, Respiratory Rate will be noted.

**Study Population-**

Total 30 patients of either gender between the age group of 35 to 60 years were selected randomly for the study. The cases are selected as per signs and symptoms of *Anidra* (insomnia) w.s.r. Essential hypertension.

Ethical clearance and verbal consent was obtained before the conduction of study.

**Diagnostic criteria-**

1. For diagnosis detailed medical history, mental examination will be carried out and physical

examination will be done as per the Ayurvedic and modern methods.

2. Guidelines mentioned in ICD-10 will be followed.<sup>13</sup>

- a) A complaint of difficulty falling asleep, maintaining sleep, or non refreshing sleep.
- b) The sleep disturbance occurs at least three times per week for at least one month.
- c) The sleep disturbance results in marked personal distress or interference with personal functioning in daily living.
- d) Absence of any known causative organic factor, such as neurological or other medical condition, psychoactive substance use disorder or a medication.

#### a) Inclusion Criteria

- Patients who present with clinical features of *Anidra*
- Patients of either gender between age group of 35 to 60 years
- Patients complaining of reduction in sleep time, difficulty in initiation of sleep, wakefulness during normal sleep – either any of these or all of these for the duration of 3 months or more.
- Patients with *Nidranasha* complaining of *Angamarda, Shirogurava, Jrimbha, Jadyata, Glani, Bhrama and Apakti* - either some of these or all.
- Patients already diagnosed with insomnia with the duration of 1 month to 5 years.

#### b) Exclusion Criteria

- Patients having age below 35 years and above 60 years.
- Patients who are having Secondary hypertension due to Metabolic, Endocrinal and Chronic systemic disorders.
- Subjects diagnosed with Coronary artery disease, Ischemic heart disease, history of Myocardial infarction, Congestive cardiac failure, Cerebro-vascular accidents.
- *Nidranasha* due to other conditions like *Madatyaya* and *Abhigata*.
- *Nidranasha* associated with any other Systemic, Metabolic and Psychiatric disorder.

#### Literary source:

- All the classical, modern literatures and contemporary texts including the websites about the disease and clinical parameters will be reviewed and documented for the present study.
- Review of literature will be collected from Post Graduate Library of our Ayurved Mahavidyalaya.

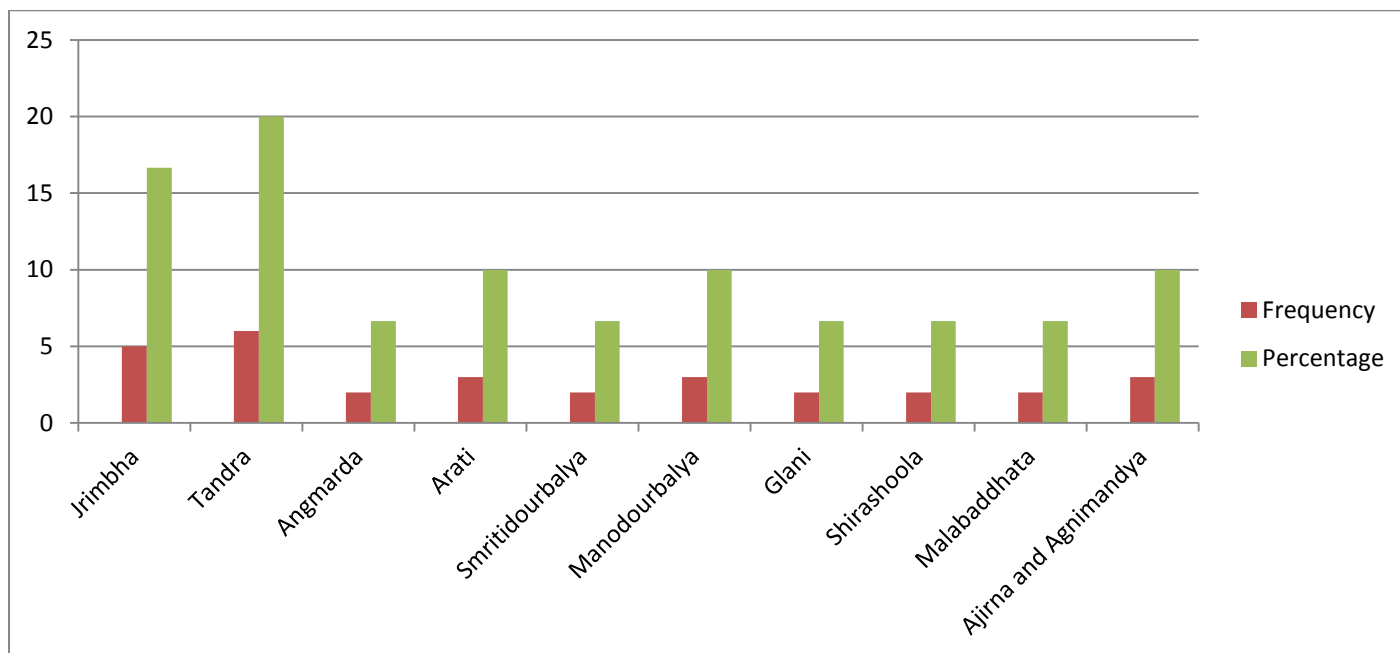
#### Results and Discussion

**Table 1.** Distribution of patients as per the *lakshanas of Anidra* (n=30)

<i>Lakshanas (Symptoms)</i>		<b>Total</b>	
<b>Ayurvedic term</b>	<b>English term</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Jrimbha</i>	Yawning	5	16.66
<i>Tandra</i>	Drowsiness	6	20.00
<i>Angmarda</i>	Malaise	2	6.66
<i>Arati</i>	Fatigue	3	10.00
<i>Smritidourbalya</i>	Lack of memory	2	6.66
<i>Manodourbalya</i>	Lack of concentration	3	10.00
<i>Glani</i>	Gidiness	2	6.66
<i>Shirashoola</i>	Headache	2	6.66

<i>Malabaddhata</i>	Constipation	2	6.66
<i>Ajirna and Agnimandya</i>	Indigestion	3	10.00

Table 1 shows , *Lakshanas* (Symptoms) like *Jrimbha* (Yawning) 16.66 % and *Tandra* (Drowsiness) 20.00 % were found in maximum number of patients, while *Smritidourbalya*, *Angmarda*, *Glani*, *Shirashoola* and *Malabaddhata* were the least common (6.66 %) *lakshanas* (symptoms) associated with *Anidra*.



**Fig. 1.** Distribution of patients as per the *lakshanas* of *Anidra* (Insomnia)

**Table 2.** Distribution of patients as per the grades of hypertension <sup>14</sup> (n=30)

Blood pressure (In mmHg)	Grades	Frequency	Percentage
<b>Systolic Pressure</b>			
130-139	High normal	5	16.66
140-159	Stage 1 hypertension	13	43.33
160-179	Stage 2 hypertension	10	33.33
> 180	Stage 3 hypertension	2	6.66
<b>Diastolic Pressure</b>			
80-89	High normal	4	13.33
90-99	Stage 1 hypertension	12	40.00
100-110	Stage 2 hypertension	11	36.66
> 110	Stage 3 hypertension	3	10.00

Table 2. showing patients as per the grades of hypertension. Maximum patients were in stage 1 hypertension with blood pressure ranging between 140-159 mmHg systolic (43.33%) and 90-99 mmHg of diastolic blood pressure (40.00 %). While only 6.66 % and 10 % of patients were in stage 3 hypertension (both Systolic and Diastolic Blood Pressure respectively).

**Table 3-** Distribution of patients as per the symptoms of Essential Hypertension (n=30)

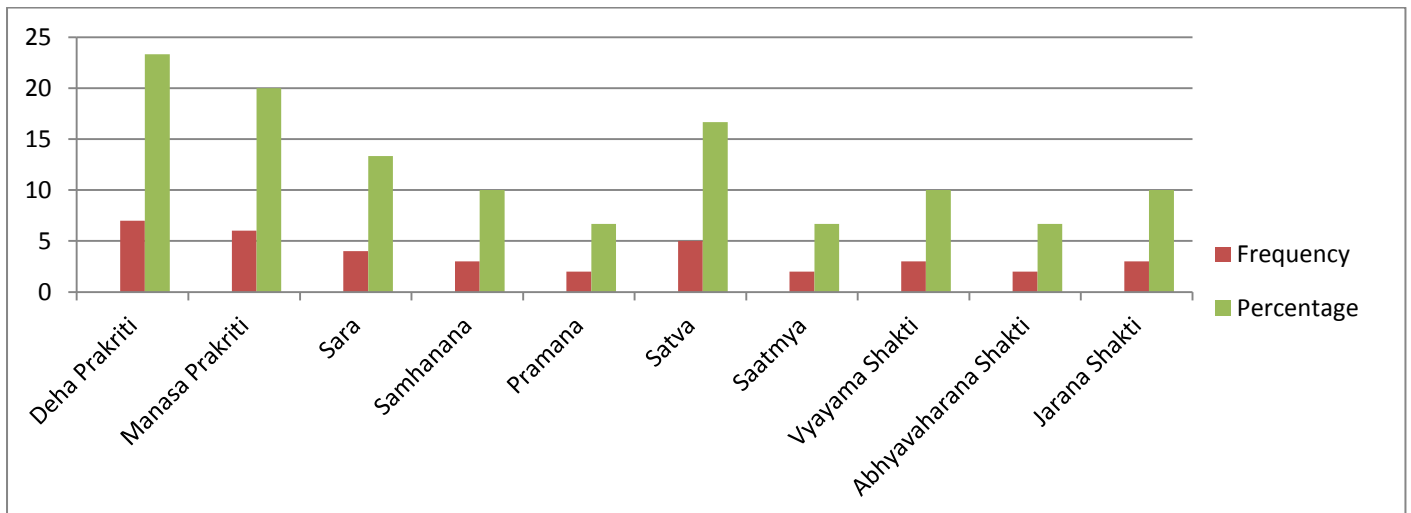
Symptoms	Frequency	Percentage
Giddiness	7	23.33
Fatigue	4	13.33
Headache	3	10
Dyspnea	2	6.66
Palpitation	3	10
Tinnitus	1	3.33
Insomnia	6	20
Irritability	2	6.66
Anxiety	2	6.66

Table 3 shows, symptoms of Essential Hypertension. Giddiness 23.33 % and insomnia 20 % were most common symptoms; while tinnitus 3.33 %, irritability 6.66 % and anxiety 6.66 % were the least common symptoms observed in the patients.

**Table 4-** Distribution of patients as per their *Dashvidh Pariksha* (n=30)

<i>Dashvidh Pariksha</i>		Frequency	Percentage
<i>Deha Prakriti</i>	<i>Vata- pitta Pradhana</i>	7	23.33
<i>Manasa Prakriti</i>	<i>Raja Pradhana</i>	6	20.00
<i>Sara</i>	<i>Madhyama</i>	4	13.33
<i>Samhanana</i>	<i>Madhyama</i>	3	10.00
<i>Pramana</i>	<i>Madhyama</i>	2	6.66
<i>Satva</i>	<i>Madhyama</i>	5	16.66
<i>Saatmya</i>	<i>Madhyama</i>	2	6.66
<i>Vyayama Shakti</i>	<i>Madhyama</i>	3	10.00
<i>Abhyavaharana Shakti</i>	<i>Avara</i>	2	6.66
<i>Jarana Shakti</i>	<i>Avara</i>	3	10.00

Table 4 shows, distribution of patients as per the their *Dashvidh Pariksha*. It was found that out of total 30 participants, 6 (20 %) subjects were having *Raja Pradhan Manas Prakriti* suggesting its prime role in causing Essential hypertension. We also found that out of total study subjects studied, total 7 (23 %) subjects were having *Pitta-vata Pradahana Deha Prakriti*. Out of total patients, only 2 (6.6 %) of patients were having *Madhyama pramana, saatmya and Abhyavaharana shakti*.



**Fig. 2-** Distribution of patients as per their *Dashvidh Pariksha*.

## Discussion

Symptoms like *Jrimbha* (Yawning) and *Tandra* (Drowsiness) were found in maximum (36.66 %) of patients., while *Smritidourbalya*, *Manodourbalya*, *Glani*, *Shirashoola* and *Malabaddhata* were the least common (6.66 %) symptoms associated with *Anidra*.

It was found that, maximum patients were in stage 1 hypertension with blood pressure ranging between 140-159 mmHg systolic (43.33%) and 90-99 mmHg of diastolic blood pressure (40.00 %). While only 6.66 % and 10 % of patients were in stage 3 hypertension (both Systolic and Diastolic Blood Pressure respectively).

It was found that out of total 30 participants, 6 (20 %) subjects were having *Raja Pradhan Manas Prakriti* suggesting its prime role in causing Essential hypertension. We also found that out of total study subjects studied, total 7 (23 %) subjects were having *Vata-pitta Pradhan Deha Prakriti*. Out of total, very less proportion i.e. 2 (6.6 %) of patients were having *Madhyama pramana*, *saatmya* and *Abhyavaharana shakti*.

Ayurvedic herbal remedies, dietary suggestions, lifestyle management and shirodhara work well with *anidra* and stage 1 hypertension. The constant flow of liquid in a specified manner relaxes the mind, calms and tranquilizes the patients. The prescribed medicated oil or liquid is continuously poured over the forehead (the third 'eye') pacifies *Vata* along with other two *Doshas*, *Pitta* and *Kapha*.

The Ayurvedic aspect of mechanism of action of *Shirodhara* can be well understood by the concept of *Tridosha*. To be more precise it may have probable effect on *Tarpaka*, *Kapha* and *Sadhak Pitta*. It also increases *Tarpaka Kapha*; has a sedative and soothing effect on brain and it regulates vital parameters. *Ksheerodhara* exerts its pacifying effects on *Sadhaka Pitta* and regulates function of *Hridaya*. Thus it helps to maintain heart rate i.e. pulse rate and blood pressure.

## Conclusions

1. *Jrimbha*, *Tandra*, *Arati*, *Manodourbalya* and *Ajirna* are the most common symptoms found in the patients suffered from *Anidra* (Insomnia).
2. As *Shirodhara* has a *Vata-Pitta Shamaka* property which not only reduces stress but also enhances the circulation of brain, nourishes the hair on scalp, calms the mind and body and helps to beat insomnia as well. It can be chosen since it is a very simple non-invasive procedure; can be performed in outpatients, cost effective and gives immediate relaxing effect. Therefore, it can be concluded that, it is very safe and effective modalities used in the management of *Anidra* with associated Essential hypertension.
3. Maximum proportion of patients were having *Raja pradhan manas prakriti* and *Deha pradhan vata-pitta prakriti* suggesting its prime role in causing Essential hypertension.
4. Essential hypertension is manifested by aggravation of all the *Doshas* with predominance of *Vata doshas*. *Rajas* and *Tamas* are the *mansa doshas* where as *srotas* involved are *rasavaha*, *rakta*, *mamsa* and *meda*. Thus, Essential Hypertension is mainly a *Tridoshaja Vyadhi* having the dominancy of *Vata dosha*.

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Conflict of interest- None

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